## **ABSTRACT**

In a Stirling engine, a hollow cylinder-like pressure vessel covers a cylinder, a piston, and a linear motor. The pressure vessel is divided into a ring-like portion and a dome-like portion at a position closer to the displacer installation side than a piston support-side end of the linear motor. At the divided portion, an outward-facing flange-shaped portion is formed for each of the ring-like portion and the dome-like portion. For temporary sealing of the pressure vessel, both flange-shaped portions are joined together and tightened by tightening rings and bolts. A performance check is performed in this state, and then outer peripheral portions of the flange-shaped portions are welded together for final sealing.